534. 卵形線ニツイテ

松村 宗治（台北大）

（I） *Math. Z. 44, p. 718* ニ於ケル *Goetsch* ノ定理1ハ相對微分幾何デハ $\frac{r'(\alpha)}{r(\alpha)}=\frac{h'(\varphi)}{h(\varphi)}$ ノ代リニ

$$(1)\qquad \frac{\frac{h'(\varphi)}{h(\varphi)}}{\frac{H'(\varphi)}{H(\varphi)}}=\frac{\frac{r'(\alpha)}{r(\alpha)}}{\frac{R'(\alpha')}{R(\alpha')}}\left[=\frac{\tan(\alpha-\varphi)}{\tan(\alpha'-\varphi)}\right]$$

トナリテ矢張リ成立スル H, R ハ *Eicheilinie* ニゾクシ h, r ハ考フル卵形線ニゾクスル量デアル．

（II） 次ニ同論文定理2ニ相當スルコトヲ相對微分幾何デ考ヘ

$$\frac{h'(\varphi)}{h(\varphi)}=\frac{r'(\alpha)}{r(\alpha)}\frac{d\alpha}{d\varphi}-\frac{\sin(\alpha-\varphi)}{\cos(\alpha-\varphi)}\left(\frac{d\alpha}{d\varphi}-1\right),$$

$$\frac{H'(\varphi)}{H(\varphi)} = \frac{R'(\alpha')}{R(\alpha')}\frac{d\alpha'}{d\varphi} - \frac{\sin(\alpha'-\varphi)}{\cos(\alpha'-\varphi)}\left(\frac{d\alpha'}{d\varphi}-1\right)$$

ヲ逐々計算シ、次ニソノ右辺ノ分母子ヲ $\frac{R'(\alpha')}{R(\alpha')}$ デ割リ(1)ヲ代入セバ

$$(2)\quad \frac{\frac{h'(\varphi)}{h(\varphi)}}{\frac{H'(\varphi)}{H(\varphi)}}\left[-\frac{d\alpha'}{d\varphi}+\frac{d\alpha}{d\varphi}+\frac{R(\alpha)}{R'(\alpha')}\frac{\sin(\alpha'-\varphi)}{\cos(\alpha'-\varphi)}\right]$$

$$= \frac{R(\alpha')}{R'(\alpha')}\frac{\sin(\alpha-\varphi)}{\cos(\alpha-\varphi)}\left(\frac{d\alpha}{d\varphi}-1\right)$$

ヲ得、(2)ハ吾人ノ結果デアル。